

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
9 June 2005 (09.06.2005)

PCT

(10) International Publication Number  
**WO 2005/052169 A3**

- (51) International Patent Classification<sup>7</sup>: C12N 15/82, A01N 65/00, C07K 16/16
- (74) Agent: ZACCO DENMARK A/S; Hans Bekkevolds Allé 7, DK-2900 Hellerup (DK).
- (21) International Application Number: PCT/DK2004/000822
- (22) International Filing Date: 26 November 2004 (26.11.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
PA200301759 28 November 2003 (28.11.2003) DK  
60/526,319 1 December 2003 (01.12.2003) US
- (81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- (71) Applicant (*for all designated States except US*): UNIVERSITY OF COPENHAGEN [DK/DK]; Faculty of Health Science, Tech Trans Unity, Blegdamsvej 3, DK-2200 Copenhagen N (DK).
- (72) Inventors; and
- (75) Inventors/Applicants (*for US only*): ANDREAS-SON, Erik [SE/DK]; Søllerødgade 28, 1.th., DK-2200 Copenhagen N (DK). BRODERSEN, Peter [DK/DK]; Grøntoft 6, 1.th., DK-2860 Søborg (DK). JENKINS, Tom [GB/DK]; Hospitalsvej 6, 1.th., DK-2000 Frederiksberg (DK). MUNDY, John [GB/DK]; Strindbergsvej 59, DK-2500 Valby (DK). PETERSEN, Nikolaj H.T. [DK/DK]; Tagensvej 52, vær. 522, DK-2200 Copenhagen N (DK). THORGRIMSEN, Stefan [DK/DK]; Kronprinsesse Sofiesvej 1, 1.tv., DK-2000 Frederiksberg (DK). ROCHER, Anne [FR/DK]; Dalgas Have 44 A, st.tv., DK-2000 Frederiksberg (DK).
- Published:  
— with international search report  
— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report: 29 September 2005
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: PLANT DISEASE RESISTANCE AND SAR REGULATOR PROTEIN

(57) Abstract: The invention provides a transgenic plant having increased expression of a positive regulator protein of systemic acquired resistance (SAR), thereby enhancing the SAR response and pathogen resistance of the plant. The positive regulator protein is a component of a signal transduction pathway leading to (SAR), and is a MAP kinase protein (MPK4) substrate, and interacts with transcription factors.

WO 2005/052169 A3